

WALLA WALLA COUNTY
WATER CONSERVANCY BOARD
Application for Change/Transfer
OF A RIGHT TO THE BENEFICIAL USE OF THE PUBLIC WATERS OF
THE STATE OF WASHINGTON

Report of Examination

NOTE TO APPLICANT: Pursuant to WAC 173-153-130(8), the applicant is not permitted to proceed to act on the proposal until Ecology makes a final decision affirming, in whole or in part, the board's recommendation. It is advised that the applicant not proceed until the appeal period of Ecology's decision is complete.

NOTE TO AUTHOR: Read the instructions for completing a water conservancy board report of examination. Use the F11 key to move through the form.

☒ Surface Water ☐ Ground Water

DATE APPLICATION RECEIVED March 7, 2012	WATER RIGHT DOCUMENT NUMBER SW Cert. No. 2849(A)	WATER RIGHT PRIORITY DATE October 19, 1944	BOARD-ASSIGNED CHANGE APPLICATION NUMBER WALL 12-01
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NAME KREGGER RANCHES, INC. c/o Chris Kregger			
ADDRESS (STREET) 17232 Stateline Rd.	(CITY) Touchet	(STATE) Washington	(ZIP CODE) 99360

Changes Proposed: ☐ Change purpose ☐ Add purpose ☐ Add irrigated acres ☒ Change point of diversion/withdrawal
☐ Add point of diversion/withdrawal ☒ Change place of use ☐ Other (Temporary, Trust, Interties, etc.)

SEPA

The board has reviewed the provisions of the State Environmental Policy Act of 1971, Chapter 43.21C RCW and the SEPA rules, chapter 197-11 WAC and has determined the application is: ☒ Exempt ☐ Not exempt

BACKGROUND AND DECISION SUMMARY

Existing Right (Tentative Determination)

MAXIMUM CUB FT/ SECOND 0.70	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR 127.39	TYPE OF USE, PERIOD OF USE 0.470 cubic feet per second from April 1 to July 1, 0.35 cubic feet per second from July 1 to October 1, and 0.70 cubic feet per second from October 1 to April 1, 127.39 acre-feet per year, for the irrigation of 35 acres.				
SOURCE Walla Walla River			TRIBUTARY OF (IF SURFACE WATER) Columbia River				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
No. 1	SW	SW	5	6	33 E	32	Walla Walla
No. 2	N½	SE	6	6	33 E	32	Walla Walla
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED The SW¼SW¼ of Sec. 5, T. 6 N., R. 33 E.W.M., and the SE¼SE¼ and N½SE¼ of Sec. 6., T. 6 N., R. 33 E.W.M.							
PARCEL NO. Various	¼	¼	SECTION 5 & 5	TOWNSHIP N. 6	RANGE 33 E.		

Proposed Use

MAXIMUM CUB FT/ SECOND 0.70	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR 175	TYPE OF USE, PERIOD OF USE 0.470 cubic feet per second from April 1 to July 1, 0.35 cubic feet per second from July 1 to October 1, and 0.70 cubic feet per second from October 1 to April 1, 175 acre-feet per year, for the irrigation of 35 acres.				
SOURCE Walla Walla River			TRIBUTARY OF (IF SURFACE WATER) Columbia River				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
1. 330606410004	NW	SE	6	6	33 E.	32	Walla Walla
2. 330606410003	NW	SE	6	6	33 E.	32	Walla Walla
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED That portion of the SW¼ of Section 6, T. 6 N., R. 33 E.W.M., lying southerly of the Walla Walla River. ALSO, those portions of the NE¼SE¼ of Section 6 and the NW¼SW¼ of Section 5, T. 6 N., R. 33 E.W.M., lying northerly of the Walla Walla River, Walla Walla County, Washington.							
PARCEL NO. Various	¼	¼	SECTION 5 & 6	TOWNSHIP N. 6	RANGE 33 E.		

Board's Decision on the Application

MAXIMUM CUB FT/ SECOND 0.70		MAXIMUM GAL/MINUTE		MAXIMUM ACRE-FT/YR 127.39		TYPE OF USE, PERIOD OF USE 0.470 cubic feet per second from April 1 to July 1, 0.35 cubic feet per second from July 1 to October 1, and 0.70 cubic feet per second from October 1 to April 1, 127.39 acre-feet per year, for the irrigation of 35 acres.		
SOURCE Walla Walla River				TRIBUTARY OF (IF SURFACE WATER) Columbia River				
AT A POINT LOCATED: PARCEL NO.		¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
1. 330606410004		NW	SE	6	6	33 E.	32	Walla Walla
2. 330606410003		NW	SE	6	6	33 E.	32	Walla Walla
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED								
That portion of the SW¼ of Section 6, T. 6 N., R. 33 E.W.M., lying southerly of the Walla Walla River. ALSO, those portions of the NE¼SE¼ of Section 6 and the NW¼SW¼ of Section 5, T. 6 N., R. 33 E.W.M., lying northerly of the Walla Walla River, Walla Walla County, Washington								
PARCEL NO. Various		¼	¼	SECTION 5 & 6	TOWNSHIP N. 6		RANGE 33 E.	

DESCRIPTION OF PROPOSED WORKS

75 HP Pump, mainline, 1/2 center pivot (Kregger). 75 HP Pump, mainline, handline sprinklers (Buckley)

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE: Started	COMPLETE PROJECT BY THIS DATE: Completed	COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE: March 1, 2015
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REPORT

NOTE TO AUTHOR: This form reflects the minimum regulatory requirements as required in WAC 173-153-130(6). In accordance with WAC 173-153-130(5), "It is the responsibility of the water conservancy board to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." Completion solely of the minimum regulatory requirements may not constitute a fully documented decision.

BACKGROUND

On March 7, 2012, Kregger Ranches, Inc. of Touchet, Washington filed an application for change with the Walla Walla County Water Conservancy Board ("Board") to change the place of use and change the location of the two authorized points of diversion to Surface Water Certificate No. 2849 ("Cert. 2849"). The application was accepted at an open public meeting of the Board on March 7, 2012, and the Board assigned the application number WALL 12-01.

Attributes of the water right as currently documented

Name on certificate, claim, permit:	Remie De Ruwe
Water right document number:	Surface Water Certificate No. 2849
As modified by certificate of change number:	N/A
Priority date, first use:	October 19, 1944
Water quantities:	Qi: 0.47 cubic feet per second from 4/1 – 7/1; 0.35 cubic feet per second from 7/1 – 10/1; 0.70 cubic feet per second from 10/1 – 4/1 Qa: 175 acre ft./ year
Source:	Walla Walla River
Point of diversion/withdrawal:	(1). SW1/4SW1/4 of Sec. 5 (2). N1/2SE1/4 of Sec. 6 both in T. 6 N., R 33 E.
Purpose of use:	Irrigation of 35 acres
Period of use:	Irrigation season
Place of use:	The SW1/4SW1/4 of Section 5, T. 6 N., R. 33 E.W.M., and the SE1/4SE1/4 and N1/2SE1/4 of Section 6, T. 6 N., R. 33 E.W.M.
Existing provisions:	N/A

Tentative determination of the water right

The tentative determination is provided on the front page of this report.

History of water use

The subject water right, Cert. No. 2849, was first put to use in 1947. This surface water right is used in conjunction with several other rights to irrigate the subject lands. The right has historically been used by two separate landowners; the applicant, Kregger Ranches, on the south side of the Walla Walla River, and Mike Buckley, on the north side of the River. The right is divided such that Buckley has been irrigating approximately 21.5 acres of the total right, and Kregger Ranches 13.5 acres. While there are two points of diversion currently authorized, only one has been used in the past, and has since been abandoned. The two points of diversion proposed as the new points in this application have actually been in place and in use for several decades.

Previous changes

There have been no previous changes perfected on this water right.

SEPA

The board has reviewed the proposed project in its entirety. The board has reviewed the proposed project in its entirety. A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- It is a surface water right application for more than 1 cubic feet per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
- It is a groundwater right application for more than 2,250 gallons per minute;
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions it is categorically exempt from SEPA and a threshold determination is not required.

Statutory Requirements/Authorities for Proposed Change

The following is a list of pertinent Washington State Statute and Case Law requirements that must be considered prior to authorizing the proposed change in place of use and point of diversion:

RCW 90.03.380(1) states, in part, that a water right which has been put to beneficial use may be changed. The point of diversion and/or place of use of a right may be changed without losing the priority of said right provided that the change does not cause injury or detriment to existing rights.

The Washington Supreme Court has held that when processing an application for change to a water right, a tentative determination of extent and validity of the claim or right is required. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp*.

Other

N/A

The information or conclusions in this section were authored and/or developed by Bill Neve of Water Right Solutions.

COMMENT AND PROTESTS

Public notice of the application was given in the Waitsburg Times on December 13th and 20th, 2012. Protest period ended on January 22, 2013.

There were no protests received during the 30 day protest period. In addition, no oral and written comments were received at an open public meeting of the board or other means as designated by the board.

Other

N/A

The information or conclusions in this section were authored and/or developed by Bill Neve of Water Right Solutions.

INVESTIGATION

The following information was obtained from a site inspection conducted by Mike Dobbins on 8/1/12, and a review of a variety of data sources. The following are some of the primary sources of information obtained and utilized in the investigation:

- Water right files for Cert. 2849
- Farm Service Agency (FSA) cropping records
- Technical reports
- U.S. Geological Survey topographic maps
- Aerial photos
- Department of Ecology's Water Right Tracking System (WRTS) database/Water Resource Explorer website
- Review of applicable laws, site visits, rules and policies
- Conversations with the applicant/farmers and/or other interested parties

Proposed project plans and specifications

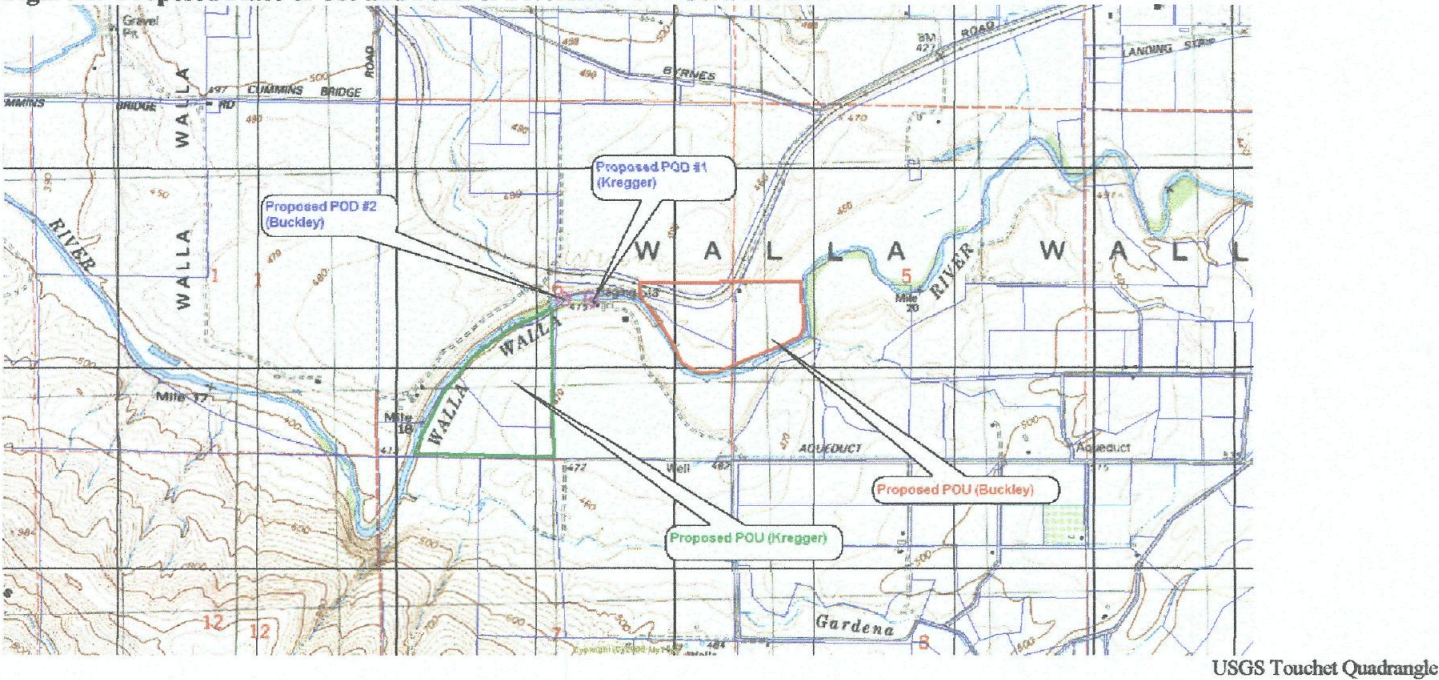
The proposed changes in place of use to Cert. No. 2849 will not substantially change or move the authorized place of use; the proposal is to change the areas authorized for irrigation slightly to conform with the intended irrigation practices. The changes in point of diversion are defacto change requests, in that the changes do not actually request physical changes in the point of diversion, but rather changes in the paper authorization to match where the pumping stations are actually located and currently in use.

The intent of the Kregger portion of this change is to adjust the authorized place of use for Cert. No. 2849 to cover 13.5 acres of a 126 acre half pivot. A portion of these lands (approximately one-half) are already irrigated under rights. The other half, which currently does not have any appurtenant surface water rights, will be irrigated by means of the Kregger 32.5 acre share of Surface Water Cert. No. 1200 and the 13.5 acre share of Cert. No. 2849. There are currently not enough acres of water right to irrigate the full 126 acres, so a stop will be placed on the pivot to leave approximately 17 acres of the 126 pivot un-irrigated by these surface water rights. Concurrent change applications to Surface Water Cert. Nos. 1200 (13.5 acres) and 3686 (80 acres) are pending for change in place of use to cover 109 of the 126 acres covered by the pivot. Changes in place of use and points of withdrawal to Ground Water Permit No. G3-28507 have recently been approved to cover these same acres.

One of the two currently authorized points of diversion is also proposed to be changed to that pumping station which has been actually been used to divert water under this right for several decades.

The intent of the Buckley portion of this change is to confirm allocation of water under Cert. No. 2849, to change the other existing point of diversion to his pumping station which has also been used to divert water under this right for decades, and to consolidate the place of use of this right together with another water right he uses on these lands (and shares with Kregger Ranches), SW Cert. No. 1200.

Figure 1: Proposed Place of Use and Point of Diversion - SW Cert. No. 2849



Other water rights appurtenant to the property (if applicable)

Kregger Portion: There are several water rights which are proposed to include the same place of use as that proposed herein. It should be noted that there are concurrent change applications pending for each of these rights (excepting WW Adj. Cert. No. 406) to change the place of use to include the same lands as those proposed herein as the new place of use. The primary attributes of these rights are as follows:

Walla Walla River Adjudication Certificate No. 406 (Gardena Farms Irr. Dist. No. 13)

Priority Date:	1892 (Class 30)
Source:	Walla Walla River
Quantities:	93.3 cubic feet per second from 4/1 – 7/1; 70.0 cubic feet per second from 7/1 – 10/1; 140 cubic feet per second from 10/1 – 4/1, when allowed
Purpose of use:	Irrigation of 7000 acres
Diversion point:	SW¼SW¼ of Sec. 5, T. 6 N., R. 35 E.W.M.

Walla Walla River Adj. Cert. No. 406 is controlled by Gardena Farms Irrigation District No. 13. The acres authorized for irrigation and annual quantities of water allocated to this property can and do vary over time, and water may be restricted to these lands on a seasonal basis as well. Any changes in allocation/place of use of water delivered to the applicant by the District through this right are a matter handled internally by the District. This is currently the only water right that could potentially be available for use on the existing place of use (Kregger portion) if all pending change applications for this project are approved.

Surface Water Certificate No. 1200

Priority Date:	August 12, 1937
Source:	Walla Walla River
040-106(0208)	

Quantities: 0.73 cubic feet per second from April 1 to July 1
 0.55 cubic feet per second from July 1 to October 1
 0.1.10 cubic feet per second from October 1 to April 1

Purpose of use: Irrigation of 55 acres¹

Diversion point: SW¼ of Sec. 5, T. 6 N., R. 33 E.W.M.

¹ This right is divided such that 32.5 acres convey to Kregger and 22.5 acres to Buckley.

Surface Water Certificate No. 3686

Priority Date: October 22, 1947

Source: Walla Walla River

Quantities: 1.06 cubic feet per second from June 1 to July 1
 0.80 cubic feet per second from July 1 to October 1

Purpose of use: Irrigation of 80 acres

Diversion point: SE¼ of Sec. 6, T. 6 N., R. 33 E.W.M.

The 80 acres authorized for use under Cert. No. 3686, together with the 13.5 acre Kregger share of Cert. No. 2849, have concurrent change applications pending that would, together with approval of this application, authorize the change in place of use to cover 109 acres of the 126 acres to cover the proposed ½ center pivot.

Ground Water Permit No. G3-28507P

Priority Date: August 15, 1988

Source: Three wells (gravel aquifer)

Quantities: 2100 gpm, 1395 acre-feet per year

Season of Use: January 1 to December 31 for irrigation; continuously for domestic supply

Purpose of use: Irrigation of 300 acres, single domestic supply

Withdrawal point: (1) NE¼NE¼ of Sec. 7, T. 6 N., R. 33 E.W.M.

(2) NE¼SE¼ of Sec. 6, T. 6 N., R. 33 E.W.M.

(3) SE¼SW¼ of Sec. 6, T. 6 N., R. 33 E.W.M.

Ground Water Permit No. G3-28507P was recently approved for a change to allow the drilling of two additional wells to allow for the permit to be more fully developed. The authorized place of use for Permit No. G3-28507P includes the proposed place of use under this change application, and one of the wells authorized for use under Permit No. G3-28507P is also located within the proposed place of use. This Permit provides an additive supply of water to the above described surface water rights, to the extent of 4.65 acre-feet per acre.

Buckley Portion: There is one other water right which includes a portion of the Buckley place of use, and if this change is approved, will share the identical authorized place of use as that proposed here in for the Buckley portion of Cert. No. 2849.

Surface Water Certificate No. 1200

Priority Date: August 12, 1937

Source: Walla Walla River

Quantities: 0.73 cubic feet per second from April 1 to July 1
 0.55 cubic feet per second from July 1 to October 1
 0.1.10 cubic feet per second from October 1 to April 1

Purpose of use: Irrigation of 55 acres¹

Diversion point: SW¼ of Sec. 5, T. 6 N., R. 33 E.W.M.

¹ This right is divided such that 32.5 acres convey to Kregger and 22.5 acres to Buckley.

This right is additive to Cert. No. 2849. If both this change application and the concurrent change application for Cert. No. 1200 are approved, the total number of acres that would be authorized for irrigation on the Buckley place of use would be 44 acres, which match the total number of acres currently being irrigated within that legal description.

Public Interest (groundwater only)

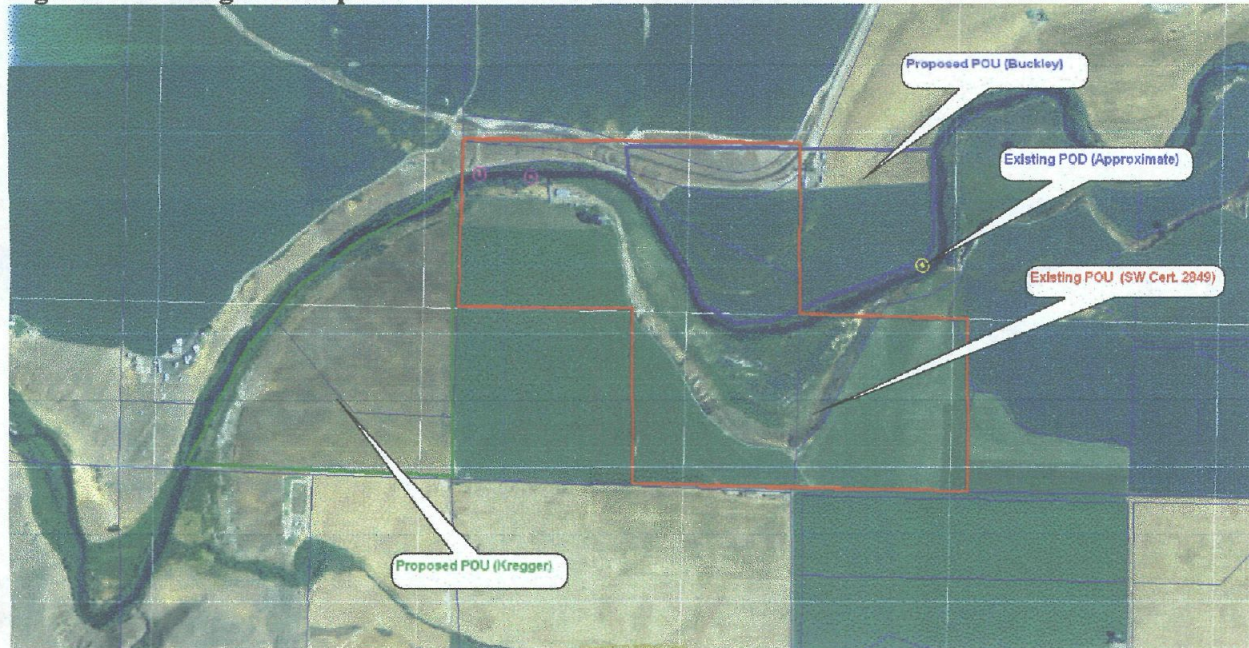
The proposed changes, relating to a surface water right, are not subject to RCW 90.44.100 and therefore, are not legally required to be evaluated in terms of whether or not the change will be detrimental to the public interest, including impacts on any watershed planning activities. While such an evaluation is not legally required for this application, public interest considerations are an important aspect of the use of surface water in this basin. An analysis of public interest considerations is provided for advisory purposes, below.

- a. *Comments/Protests:* No comments or protests were received regarding potential approval of the proposed change.
- b. *Walla Walla County Municipal Code (Codified as Ordinance 369, November 10, 2008):* The proposed place of use for the subject water right is located within the Primary Agriculture – 40 acre-minimum lot size zoning district. As the changes proposed herein would not change the existing agricultural use of the subject lands, it is consistent with the Walla Walla County Code.
- c. *WRIA 32 Watershed Plan:* The proposed changes are consistent with the locally developed and approved basin watershed plan, which expressed a desire that new water rights or changes to existing water rights not negatively impact streams, springs, or wells hydraulically connected to surface waters sources within WRIA 32. When used conjunctively with other existing rights appurtenant to the proposed place of use, approval of the proposed changes should actually serve to improve instream flows in the Walla Walla River through improved irrigation application efficiencies and resulting reduced diversions of surface water.

Tentative Determination

In order to make a water right change decision, the Board must make a tentative determination on the validity and extent of the right. The Board has made the tentative determination as displayed upon the first page of this report. There are several circumstances that can cause the board's tentative determination to differ from the stated extent of the water right within water right documentation. Water right documents attempt to define a maximum limitation to a water right, rather than the actual extent to which a water right has been developed and maintained through historic beneficial use. Additionally, except for a sufficient cause pursuant to RCW 90.14.140, water rights, in whole or in part, not put to a beneficial use for five consecutive years since 1967 may be subject to relinquishment under Chapter 90.14.130 through 90.14.180 RCW. Water rights may additionally be lost through abandonment. The Board's tentative determination was based upon the following findings:

Figure 2: Existing and Proposed Place of Use and Point of Diversion – SW Cert. No. 2849



Aerial Photo Date: July 11, 2009

Kregger Portion (13.5 acres)

A 75 HP surface water pump is used to service the subject 13.5 acres through Cert. No. 2849, and is also used to supply water to other lands covered by separate surface water rights. Calculating quantities of water, both instantaneous rate and annual duty, based on pumping records at the source are therefore not particularly relevant in this case. Farms Service Agency (FSA) records and the State of Washington Irrigation Guide are used here as primary references to estimate historic water use.

The Kregger portion of Cert. No. 2849 being evaluated authorizes the diversion of 0.181 cubic feet per second from April 1 to July 1; 0.135 cubic feet per second from July 1 to October 1; and 0.270 cubic feet per second from October 1 to April 1, 67.5 acre-feet per year, for the irrigation of 13.5 acres. For purposes of this tentative determination, each component of water use will be evaluated separately.

Instantaneous Quantity (Qi):

The diversion facilities associated with Kregger portion of Cert. No. 2849, which utilizes a newly installed 75 HP pump, has the capacity to pump the full maximum instantaneous quantity allowed, which is 0.27 cubic feet per second, or 121 gallons per minute. As stated previously, this pump is used to supply water to other lands under separate water rights as well. The applicant has historically pumped water from the Walla Walla River at rates exceeding 1200 gpm to service the 13.5 acres under this right in addition to other lands under authority of different rights. The season of use for this right runs generally from early March to as late in the year as necessary (often into December) to apply the desired quantity of water to the land, or until the irrigation systems freeze up, whichever comes first. The full maximum instantaneous quantity – 0.27 cubic feet per second – authorized for use under Cert. No. 2849 is valid and available for consideration of the proposed changes under this application.

Acres:

A review of Farm Service Agency (FSA) records was conducted to determine the extent of acres actually irrigated under this water right (see Table 1). This information was compared with aerial photos to confirm the FSA data (Figure 2, above). The records show that approximately 76 acres have been irrigated on the Kregger portion of the place of use through a combination of existing surface water rights, which include the 13.5 acres share of SW Cert. No. 2849. The intent of this application is to adjust the place of use such that all the existing surface water rights on the existing place of use will be shifted to the proposed place of use, with the only surface water right potentially remaining for use on the existing place of use will be WW Adj. Cert. No. 406 through Gardena Farms Irrigation District. So while more than 13.5 acres are being irrigated within the place of use of Cert. No. 2849, these acres are being irrigated under authority of other water rights to which there are concurrent change applications pending that would shift the place of use of these rights to the same lands as those proposed as the new place of use herein. It is concluded that the Kregger 13.5 acre share of water right has historically been irrigated, and is available for consideration under the proposed change.

Annual Quantity (Qa)

For purposes of determining the historic annual water use, crop irrigation requirements from the State of Washington Irrigation Guide (WIG) and crop type/acreage data obtained from the Walla Walla FSA office were utilized to estimate annual water use on the subject 13.5 acres. The WIG data is based on conditions more representative of the eastern portion of the basin, which is in a higher rainfall zone (~15 inches vs. ~9 inches, annually) and where the crop irrigation requirements are generally lower. However, this is currently the most representative data set available for estimating crop irrigation requirements in the Touchet area. The results are summarized in Table 1, below.

Table 1: Crop Type, Acres, and Total Irrigation Requirement Estimates - Cert. No. 2849 (Kregger – 13.5 acres)

Year	Crop Type ¹	Acres ¹	CIR ² (inches)	Application Eff. ³ (%)	TIR ⁴ (ac/ft per acre)	TIR (ac/ft for 13.5 acres)
2012	Alfalfa	13.5	32.85	70	3.91	52.78
2011	Peas	13.5	16.15	70	1.92	25.92
2010	Wheat (W)	13.5	18.64	70	2.22	29.97
2009	Alfalfa	13.5	32.85	70	3.65	52.78
2008	Alfalfa	13.5	32.85	70	3.91	52.78
2007	Alfalfa	13.5	32.85	70	3.91	52.78

¹ From Farm Service Agency records

² Crop Irrigation Requirements for selected crops in the Walla Walla Valley – State of Washington Irrigation Guide

³ From Ecology Guidance 1210 – *Determining Irrigation Efficiency and Consumptive Use*, Table 1. Irrigation methods used: Handline and Tri-Matic.

⁴ Total Irrigation Requirement – (CIR x Irr. Eff.)/12 = acre-feet requirement

Based on the information provided in Table 1, the maximum annual use of water on the subject 13.5 acres over the past 6 years is 52.78 acre-feet per year for alfalfa.

The total quantities of water determined to have been historically put to beneficial use, and available for consideration for the Kregger portion of SW Cert. No. 2849, are 0.181 cubic feet per second from April 1 to July 1; 0.135 cubic feet per second from July 1 to October 1; and 0.270 cubic feet per second from October 1 to April 1, 52.78 acre-feet per year, for the irrigation of 13.5 acres.

Buckley Portion (B -21.5 acres)

A 75 HP surface water pump is used to service the subject 21.5 acres through Cert. No. 2849, and is also used to supply water to other lands covered under authority of separate surface water rights. Calculating quantities of water diverted under Cert. No. 2849, both instantaneous rate and annual duty, based on pumping records at the source are therefore not particularly relevant in this case. Farms Service Agency (FSA) records and the State of Washington Irrigation Guide are used here as primary references to estimate historic water use.

The Buckley portion of Cert. No. 2849 being evaluated authorizes the diversion of 0.289 cubic feet per second from April 1 to July 1; 0.215 cubic feet per second from July 1 to October 1; and 0.430 cubic feet per second from October 1 to April 1, 107.5 acre-feet per year, for the irrigation of 21.5 acres. For purposes of this tentative determination, each component of water use will be evaluated separately.

Instantaneous Quantity (Qi):

The diversion facilities associated with Buckley portion of Cert. No. 2849, has the capacity to pump the full maximum instantaneous quantity allowed, which is 0.43 cubic feet per second, or 193 gallons per minute. As stated previously, the 75 HP pump is used to supply water to other lands under separate water rights as well. The applicant has historically pumped water from the Walla Walla River at rates exceeding 900 gpm to service the 21.5 acres under this right in addition to other lands under authority of different rights. The customary irrigation season in the area generally lasts from early March to as late in the year as necessary (often into December) to apply the desired quantity of water to the land, or until the irrigation systems freeze up, whichever comes first. The full maximum instantaneous quantity – 0.43 cubic feet per second - authorized for use under Cert. No. 2849 is valid and available for consideration of the proposed changes under this application.

Acres:

A review of Farm Service Agency (FSA) records was conducted to determine the extent of acres actually irrigated under this water right (see Table 2, below). This information was compared with aerial photos to confirm the FSA data (Figure 2, above). The records show that approximately 44 acres have been irrigated on the Buckley portion of the place of use through a combination of the 21.5 acres under SW Cert. No. 2849 and 22.5 acres under SW Cert. No. 1200. The intent of the Buckley portion of this application is to change the place of use to the both SW Cert. No. 2849 and 1200 to allow for the integrated irrigation of the 44 acre field. It is concluded that the Buckley 21.5 acre share of this water right has historically been irrigated, and is available for consideration under the proposed change.

Annual Quantity (Qa)

For purposes of determining the historic annual water use, crop irrigation requirements from the State of Washington Irrigation Guide (WIG) and crop type/acreage data obtained from the Walla Walla FSA office were utilized to estimate annual water use on the subject 21.5 acres. The WIG data is based on conditions more representative of the eastern portion of the basin, which is in a higher rainfall zone (~15 inches vs. ~9 inches, annually) and where the crop irrigation requirements are generally lower. However, this is currently the most representative data set available for estimating crop irrigation requirements in the Touchet area.

While the WIG was the primary reference utilized to determine irrigation requirements for these crops in this specific area, alfalfa seed is not a crop currently referenced in the Guide; therefore crop irrigation use for alfalfa seed was determined based on the existing irrigation system and scheduling used by the grower (see Tables 2 and 3).

Irrigation for alfalfa seed will vary depending on the season and stage of growth of the crop, which is typically grown on a 4-year rotation with grain. The highest irrigation water use occurs when new seeding is initially established, which generally involves a double cropping system with spring grain followed by new alfalfa seed establishment in late summer and fall. The applicant has historically used irrigation hand line to irrigate alfalfa seed on the subject lands. The line spacing used is 40 feet by 40 feet sprinkler to riser. The nozzle discharge rate averages 5 gallon per minute.

A 40 foot by 40 foot spacing, with 5 gallons per minute nozzle discharge, equates to a 0.30 inches per hour application rate. An efficiency factor to account for conveyance losses is appropriate in this situation. Department of Ecology Guidance Document GUID-1210, “Determining Irrigation Efficiency and Consumptive Use” notes that the National Irrigation Handbook, 1997,

identifies the magnitude of irrigation system leaks at 1 – 10%, with the lower end of the range indicative of a well-maintained system. The applicant’s system is older, and of average maintenance for the area, with typical system leaks at pipe gaskets, sprinkler heads, and valves. It is estimated that the average loss in a line of this type for this system is in the middle of the predicated range, or a 5% efficiency factor.

The double cropping system used when establishing new seeding involves 2-24 hour sets for spring grain, followed by a 12, 24 and finally a 48 hour irrigation set for the new alfalfa seeding (Table 2). The following year typically involves a 48 hour set in the spring, followed by a 12 hour set in the summer, and another 48 hour set in the fall (Table 3).

Table 2: Irrigation Water Use Estimate – Irrigation Scheduling: Spring Grain + Alfalfa Seed (New Seeding)

Season	Lateral Spacing	Sprinkler Spacing	Sprinkler Rate (gpm)	Irrigation Hours	Total Qa at 95% efficiency
Spring (Grain)	40	40	5.0	48	15.16
Summer/Fall (New seeding)	40	40	5.0	84	26.53
Totals					41.69 (3.47 ac/ft)

Table 3: Irrigation Water Use Estimate – Irrigation Scheduling: Alfalfa Seed (Established)

Season	Lateral Spacing	Sprinkler Spacing	Sprinkler Rate (gpm)	Irrigation Hours	Total Qa at 95% efficiency
Spring	40	40	5.0	48	15.16
Summer	40	40	5.0	12	3.79
Fall	40	40	5.0	48	15.16
Total					34.11 (2.84 ac/ft)

A summary of the estimated irrigation requirement for crops grown on the Buckley portion of SW Cert. No. 2849 is provided below.

Table 4: Comparison of Irrigation Requirements – Buckley 21.5 acres under Cert. No. 2849 - (2007 – 2012)

Crop Type	CIR (inches)	Irr. Scheduling (inches)	Efficiency Factor	Acre-Feet	Acre-Feet (21.5 acres)
Alfalfa Seed ^a		34.11	N/A	2.84	61.06
Alfalfa Seed (New Seed) ^a		26.53	N/A	2.21	47.52
Spring Grain (Irr. Sch.)		15.16	N/A	1.26	27.09
Spring Grain (WIG)	20.85		0.70	2.48	53.32

^a No irrigation requirement included for alfalfa seed in the current Irrigation Guide. Figures based on irrigation scheduling calculations.

A comparison of the crops grown on the subject 21.5 for the crop years 2007-2012 is shown in Table 5. This table illustrates that irrigation for new alfalfa seeding, which involves a double cropping of wheat and new seeding of alfalfa, results in the highest annual water use over the period of record. While the allocation utilizing the WIG estimate for spring grain would be higher, the estimate for water use based on the actual system and irrigation scheduling for both alfalfa seed and spring grain is used as a more accurate representation. For irrigation of 21.5 acres, the total irrigation requirement equates to a total allocation of 74.61 acre-feet per year.

Table 5: Crop Type, Acres, and Total Irrigation Requirement Estimates - Cert. No. 2849 (Buckley – 21.5 acres)

Year	Crop Type ¹	Acres ¹	CIR ² (inches)	Application Eff ³ (%)	TIR (per acre)	TIR (for 21.5 acres)
2012	Alfalfa Seed (New)	21.5			3.47 ⁴	74.61
2011	Wheat (S)	21.5	20.85	70	1.92 ⁵	41.28
2010	Alfalfa Seed	21.5			2.84 ⁴	61.06
2009	Alfalfa Seed	21.5			2.84 ⁴	61.06
2008	Alfalfa Seed (New)	21.5			3.47 ⁴	74.61
2007	Wheat (S)	21.5	20.85	70	3.91 ⁵	41.28

¹ From Farm Service Agency records. Total area irrigated under SW Cert. Nos. 2849 & 1200 within proposed place of use is 44 acres.

² Crop Irrigation Requirements for selected crops in the Walla Walla Valley – State of Washington Irrigation Guide, 1985 (amended 1990, 1992)

³ From Ecology Guidance 1210 – Determining Irrigation Efficiency and Consumptive Use, Table 1. Irrigation methods used: Handline.

⁴ Calculated from irrigation system setup/scheduling

⁵ Total Irrigation Requirement – (CIR x Irr. Eff.)/12 = acre-feet requirement

The total quantities of water determined to have been historically put to beneficial use, and available for consideration for the Buckley portion of SW Cert. No. 2849, are 0.289 cubic feet per second from April 1 to July 1; 0.215 cubic feet per second from July 1 to October 1; and 0.430 cubic feet per second from October 1 to April 1, 74.61 acre-feet per year, for the irrigation of 21.5 acres.

Full Tentative Determination

The combined historical beneficial use analysis for Cert. No. 2849 equates to 0.47 cubic feet per second (211 gpm) from April 1 to July 1, 0.35 cubic feet per second (157 gpm) from July 1 to October 1, and 0.70 cubic feet per second (315 gpm) from October 1 to April 1, 127.39 acre-feet per year, for the irrigation of 55 acres.

The two landowners using water under this right have cooperated and coordinated in use of water under this right in the past, and wish to maintain this right in whole so as to provide maximum flexibility in use of the available instantaneous

allocations. Their historical cropping practices involving alfalfa hay and alfalfa seed, respectively, are conducive to alternating use of water under this water right so as to take full advantage the available instantaneous supply, and to provide the maximum net benefit. Alfalfa seed cultivation does not require irrigation during the primary summer irrigation season, a time when the water requirement for alfalfa hay is at its highest. Conversely, the highest water requirement for alfalfa seed is in the spring and late fall, when the requirement for alfalfa hay is at its lowest.

The parties involved in use of water under this right therefore wish to keep the water right whole, while recognizing the division of the right between the two parties as shown in Table 6, below. Should the parties determine at some point in the future that they would benefit from an Administrative Division of this water right, or if at any point the use of water under this right is determined to be out of compliance with the right, the parties agree to have the right divided consistent with the apportionment in Table 6.

Table 6: Summary of Water Right Allocation: SW Cert. No. 2849

Name	Acres	4/1 – 7/1 (cfs)	7/1 – 10/1(cfs)	10/1 – 4/1 (cfs)	Acre-feet	Purpose
Kregger	13.5	0.181	0.135	0.270	52.78	Irrigation
Buckley	21.5	0.289	0.215	0.430	74.61	Irrigation
SW Cert. 2849	35	0.47	0.35	0.70	127.39	

Geologic, Hydrogeologic, or other scientific investigations (if applicable)

This application would change a point of diversion, and add a point of diversion, to pumping stations located downstream of the currently authorized pump location. There are no tributary inputs to the Walla Walla River between the current and proposed points of diversion. The proposed changes in place of use modify the existing boundaries of where the water can be used within the same general area as the existing place of use. Given that proposed points of diversion are downstream of the existing point of diversion, and there will be no substantial movement to the proposed to the place of use, no hydraulic analysis/investigation is necessary to evaluate the proposed changes.

Statutory Requirements

Applications for change to surface water certificates are governed by RCW 90.03.380 and court interpretations thereof, which hold in part that: the right to the use of water may be transferred to another and become appurtenant to any other land or place of use, and the point of diversion of water may be changed, provided that:

- The change must not cause detriment or injury to existing rights;
- A valid right/claim exists that is eligible to be changed;
- The change shall not allow for the enhancement of the right perfected under the original certificate

No Detriment/Impairment to Existing Rights:

“Impair” or “impairment” means to: 1) adversely impact the physical availability of water for a beneficial use that is entitled to protection, and/or 2) to prevent the beneficial use of the water to which one is entitled, and/or 3) to adversely affect the flow of a surface water course at a time when the flows are at or below instream flow levels established by rule (POL-1200), and/or 4) degrade the quality of the source to the point that water is unsuitable for use by existing water right holders (WAC 173-150). Demonstration of impairment would require evidence of a substantial and lasting or frequent impact reflecting such conditions.

The proposed change in place of use involves lands that area already part of, or adjacent to, the existing place of use. The quantities of water beneficially used and acres irrigated will not be increased beyond what has been tentatively determined to be valid through an extent and validity analysis; in fact the annual quantities will be reduced from what is currently authorized. The application also proposes to change the currently authorized point of withdrawal location, and to add a point of diversion, both located downstream of the existing point. There are no pumping stations in between the existing and proposed points of diversion that would be impacted by approval of these changes. This is in fact a defacto change, in that both proposed points of withdrawal have been in place and used for decades. There will be no detriment to existing water rights through approval of the proposed changes.

No Enhancement of the Original Right:

A tentative determination has been conducted to determine the extent and validity of Cert. No. 2849. The proposed change would not allow for appropriation beyond those quantities and irrigated acres determined to have been put to historic beneficial use.

A Valid Right Exists that is Eligible to be Changed:

A tentative determination of the extent and validity of Cert. No. 2849 was completed by evaluating water use under the right from 2007 to 2012. The results of the analysis determined that the following quantities are valid and available for the requested changes: 0.47 cubic feet per second from April 1 to July 1; 0.35 cubic feet per second from July 1 to October 1; and 0.70 cubic feet per second from October 1 to April 1, 127.39 acre-feet per year, for the irrigation of 35 acres. There was no evidence, either from available data or from 20+ years of this writer’s personal experience of working with water in the basin, to suggest that there have been 5 consecutive years of non-use of any of the above quantities of water during any time from 1967 to 2012.

Same Source of Water:

The source of water for this right is, and will remain, the Walla Walla River.

Other

N/A

The information or conclusions in this section were authored and/or developed by Bill Neve of Water Right Solutions.

CONCLUSIONS

Tentative determination (validity and extent of the right)

The results of a tentative determination of the water right show that the following quantities are valid and available for the requested changes: 0.47 cubic feet per second from April 1 to July 1; 0.35 cubic feet per second from July 1 to October 1; and 0.70 cubic feet per second from October 1 to April 1, 127.39 acre-feet per year, for the irrigation of 35 acres.

Relinquishment or abandonment concerns

Washington State statute (RCW 90.14.160) provides that:

“Any person entitled to divert or withdraw waters of the state through any appropriation authorized by enactments of the legislature prior to enactment of chapter 117, Laws of 1917, or by custom, or by general adjudication, who abandons the same, or who voluntarily fails, without sufficient cause, to beneficially use all or any part of said right to divert or withdraw for any period of five successive years after July 1, 1967, shall relinquish such right or portion thereof, and said right or portion thereof shall revert to the state, and the waters affected by said right shall become available for appropriation in accordance with RCW 90.03.250.”

A comparison between those quantities determined to have been put to historic beneficial use and those quantities issued on the certificate is provided in Table 6, below. The difference in annual quantity between the tentative determination of the extent and validity of the water right, being 127.39 acre-feet per year, and the annual quantity issued through the existing certificate, being 175 acre-feet, equate to 47.61 acre-feet. The instantaneous quantities and acres irrigated evaluated under this analysis determined that the full extent authorized under the existing certificate had been beneficially used.

Table 6: Tentative Determination vs. Quantities Allocated in Cert. No. 2849

	Q_i (4/1 – 7/1)	Q_i (7/1 – 10/1)	Q_i (10/1 – 4/1)	Acre-feet	Acres Irrigated
Actual Use (Tent. Det.) - Kregger	0.181	0.135	0.270	52.78	13.5
Actual Use (Tent. Det.) - Buckley	0.289	0.215	0.430	74.61	21.5
Actual Use - Total	0.470	0.350	0.70	127.39	35
WW Adj. Cert. No. 2849	0.470	0.350	0.70	175	35
Subject to Relinquishment	0	0	0	47.61	0

Based on a review of the exceptions to relinquishment for non-use of water for 5 successive years provided in RCW 90.14.140, it appears that the following quantities/purposes of use are subject to relinquishment: 47.61 acre-feet per year. The remainder of the right has been determined to have been put to beneficial use and is available for this change.

Hydraulic analysis

The points of diversion proposed for use under this application already exist. The purpose of this change is to have those pumping stations currently being utilized actually be authorized under the water right. This defacto change would move the pumping locations approximately ½ mile downstream from that point currently authorized under Cert. No. 2849. The proposed changes in point of diversion could actually serve to improve flows of the Walla Walla River through this reach.

Consideration of comments and protests

Public notice of the application was given in the Waitsburg Times on December 13th and December 20th, 2012. Protest period ended on January 22nd, 2013. There were no protests received during the 30 day protest period. In addition, no oral and/or written comments were received at an open public meeting of the board or other means as designated by the board.

Impairment

There is no evidence that the proposed changes in place of use and points of diversion will impair any existing rights, including instream flows established through WAC 173-532.

Public Interest

A determination as to whether the change is detrimental to the public interest only applies to groundwater changes pursuant to RCW 90.44.100, so is not formally considered herein.

Other

The board also considered the previous provisions associated with the water right as identified in the background section of this report when making its decision.

DECISION

Applications for change to surface water right certificates are governed by RCW 90.03.380 which state in part that: the holder of a valid surface water right may, without losing priority of right, change the point of diversion and transfer or change the place of use of a water right, provided that:

- The change must not cause detriment or injury to existing rights;
- A valid right/claim exists that is eligible to be changed;
- The change shall not allow for the enhancement of the right perfected under the original certificate

It is the conclusion of the Walla Walla County Water Conservancy Board that, in accordance with RCW 90.03.380, (1) the proposed changes in place of use and points of diversion will not impair existing rights, including instream flows established through WAC 173-532; (2) a valid right exists and is eligible to be changed to the extent the right has been put to historic beneficial use, as summarized above; and (3) that the proposed changes will not expand or enhance the right which was perfected under the original certificate. The requested changes in place of use and points of diversion to Surface Water Certificate No. 2849 are approved, subject to the provisions and conditions listed below.

The information or conclusions in this section were authored and/or developed by Bill Neve of Water Right Solutions and members of the Walla Walla County Water Conservancy Board.

PROVISIONS*Conditions and limitations*

This authorization changes the place of use and points of diversion as provided by RCW 90.03.380, and when perfected will supersede Surface Water Certificate No. 2849.

All conditions and requirements contained in reports of examination, permits or superseding certificates previously issued apply to this authorization unless specifically noted below.

Measurements, Monitoring, Metering and Reporting

1. An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC. This rule describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements".
<http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>
2. Water use data shall be recorded monthly. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year.
3. Reported water use data shall be submitted via the Internet or by using the enclosed forms. To set up an Internet reporting account, access <https://fortress.wa.gov/ecy/wrx/wrx/Meteringx/>. If you have questions or need additional forms, contact the Eastern Regional Office.
4. Future Superseding Certificates for Surface Water Certificate Nos. 2849 will not be issued until evidence of meter installation has been submitted to the Department of Ecology.

Department of Fish and Wildlife

5. No dam or weir shall be constructed in connection with this diversion.
6. The intake(s) shall be screened in accordance with Department of Fish and Wildlife screening criteria.
<http://www.wdfw.wa.gov/reg/regions.htm>

Quantity Limits, Flow and Regulation

7. This change does not authorize an enlargement of those quantities in cubic feet per second, acre-feet per year, or total irrigated acres as described under Surface Water Certificate No. 2849.
8. The two landowners involved in this change wish to retain the flexibility to alternate in use of water under this right, in order to make maximum use of available instantaneous supply. Should it become desirable to divide the water right at some point in the future, or if it becomes necessary to apportion the right due to regulatory purposes, the right shall be divided consistent with the allocations outlined in the Report of Examination for this change.

Schedule and Inspections

9. Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.
10. The water right holder shall file the notice of Proof of Appropriation of water (under which the superseding certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The superseding certificate will reflect the extent of the project perfected within the limitations of the change authorization. Elements of the proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

General Conditions

11. You are advised that the issuance of this change does not convey a right of access to, or other right to use land, which you do not legally possess. Obtainment of such a right is a private matter between the applicant and the owner of the land.
12. Use of water under this authorization shall be contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.
13. Nothing in this authorization shall be construed as satisfying other applicable federal, state, or local statutes, ordinances or regulations.
14. The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required for the actual crop(s) grown on the number of acres and the place of use specified.

Mitigation (if applicable)

No mitigation was proposed, or determined to be necessary, for approval of the proposed change.

Construction Schedule

The irrigation infrastructure is largely in place for both of the divided portions of SW Cert. No. 2849. A two-year development schedule to put the water to full beneficial use should be sufficient. Water is to be put to Full Beneficial Use by March 1, 2015.

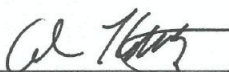
Other

N/A

The information or conclusions in this section were authored and/or developed by Bill Neve of Water Right Solutions and members of the Walla Walla County Water Conservancy Board.

The undersigned board commissioner certifies that he/she understands the board is responsible "to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." [WAC 173-153-130(5)] The undersigned therefore, certifies that he/she, having reviewed the report of examination, knows and understands the content of this report and concurs with the report's conclusions.

Signed at Walla Walla, Washington
This 2nd day of Pctober, 2013



Alan Kottwitz, Board Representative
Walla Walla County Water Conservancy Board

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